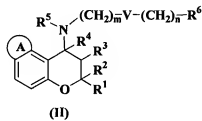
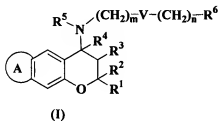


**Amendments to the Claims:**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A benzopyran derivative of formula (I) or (II), or pharmaceutically acceptable salt thereof



wherein

R<sup>1</sup> and R<sup>2</sup> are independently of each other

(i) hydrogen atom,

(ii) C<sub>1-6</sub> alkyl group, wherein group (wherein the alkyl group may be arbitrarily substituted with: with

(1) halogen atom,

(2) C<sub>1-6</sub> alkoxy group wherein (wherein the alkoxy group may be arbitrarily substituted with halogen atom atom)-or

(3) hydroxy group, group); or

(iii) C<sub>6-14</sub> aryl group, wherein group (wherein the aryl group may be arbitrarily substituted with: with

(1) halogen atom,

(2) hydroxy group,

(3) nitro group,

(4) cyano group,

(5) C<sub>1-6</sub> alkyl group, wherein group (~~wherein the alkyl group may be arbitrarily substituted with:~~ with

(a) halogen atom,

(b) C<sub>1-6</sub> alkoxy group, wherein group (~~wherein the alkoxy group may be arbitrarily substituted with a halogen atom, atom~~)-or

(c) hydroxy group ~~group~~)-or

(6) C<sub>1-6</sub> alkoxy group wherein (~~wherein the alkoxy group may be arbitrarily substituted with halogen atom, atom~~));

R<sup>3</sup> is hydroxy group or C<sub>1-6</sub> alkylcarbonyloxy group, or R<sup>3</sup> forms a bond together with R<sup>4</sup>;

R<sup>4</sup> is hydrogen atom, or R<sup>4</sup> forms a bond together with R<sup>3</sup>;

m is an integer of 0 to 4;

n is an integer of 0 to 4;

V is a single bond, CR<sup>7</sup>R<sup>8</sup> wherein R<sup>7</sup> is

(i) C<sub>1-6</sub> alkyl group, wherein group (~~wherein the alkyl group may be arbitrarily substituted with:~~ with .

(1) halogen atom,

(2) hydroxy group,

(3) C<sub>1-6</sub> alkoxy group wherein (~~wherein the C<sub>1-6</sub> alkoxy group may be arbitrarily substituted with halogen atom, atom~~);

(4) C<sub>6-14</sub> aryl group, group or C<sub>2-9</sub> heteroaryl group, wherein group (~~wherein each of the aryl group or heteroaryl group may be arbitrarily substituted with 1 to 3 R<sup>10</sup>, wherein R<sup>10</sup> is~~

(a) halogen atom;

(b) hydroxy group;

(c) C<sub>1-6</sub> alkyl group, wherein group (~~wherein the alkyl group may be arbitrarily substituted with halogen atom, hydroxy group or C<sub>1-6</sub> alkoxy group, wherein group~~ (~~wherein the alkoxy group may be arbitrarily substituted with halogen atom; atom~~));

(d) C<sub>1-6</sub> alkoxy group wherein (~~wherein the alkoxy group may be arbitrarily substituted with halogen atom; atom~~);

(e) nitro group; cyano group; formyl group; formamide group;

sulfonylamino group; sulfonyl group; amino group;

C<sub>1-6</sub> alkylamino group; di-C<sub>1-6</sub> alkylamino group;

C<sub>1-6</sub> alkylcarbonylamino group; C<sub>1-6</sub> alkylsulfonylamino group;

aminocarbonyl group; C<sub>1-6</sub> alkylaminocarbonyl group;

di-C<sub>1-6</sub> alkylaminocarbonyl group; C<sub>1-6</sub> alkylcarbonyl group;

C<sub>1-6</sub> alkoxycarbonyl group; aminosulfonyl group; C<sub>1-6</sub> alkylsulfonyl group; carboxy group or C<sub>6-14</sub> arylcarbonyl group,

and when a plurality of R<sup>10</sup> are present, they may be identical or different from each other; ~~other~~;

(5) C<sub>1-6</sub> alkylcarbonyloxy group; nitro group; cyano group; formyl group; formamide group; amino group; C<sub>1-6</sub> alkylamino group; di-C<sub>1-6</sub> alkylamino group; C<sub>1-6</sub> alkylcarbonylamino group; C<sub>1-6</sub> alkylsulfonylamino group; aminocarbonyl group; C<sub>1-6</sub> alkylaminocarbonyl group; di-C<sub>1-6</sub> alkylaminocarbonyl group; C<sub>1-6</sub> alkylcarbonyl group; C<sub>1-6</sub> alkoxycarbonyl group; aminosulfonyl group; C<sub>1-6</sub> alkylsulfonyl group; carboxy group or sulfonyl group;

(ii) ~~C<sub>6-14</sub> aryl group or group, C<sub>2-9</sub> heteroaryl group, wherein group (wherein each of the aryl group or heteroaryl group may be arbitrarily substituted with 1 to 3 R<sup>10</sup>, R<sup>10</sup> wherein R<sup>10</sup> has the above-mentioned meaning; meaning);~~

(iii) hydroxy group;

(iv) ~~C<sub>1-6</sub> alkoxy group, wherein group (wherein the alkoxy group may be arbitrarily substituted with halogen atom; atom); or~~

(v) nitro group; cyano group; formyl group; formamide group; sulfonylamino group; sulfonyl group; amino group; C<sub>1-6</sub> alkylamino group; di-C<sub>1-6</sub> alkylamino group; C<sub>1-6</sub> alkylcarbonylamino group; C<sub>1-6</sub> alkylsulfonylamino group; aminocarbonyl group; C<sub>1-6</sub> alkylaminocarbonyl group; di-C<sub>1-6</sub> alkylaminocarbonyl group; C<sub>1-6</sub> alkylcarbonyl group; C<sub>1-6</sub> alkoxycarbonyl group; aminosulfonyl group; C<sub>1-6</sub> alkylsulfonyl group; carboxy group,

(vi) ~~C<sub>6-14</sub> arylcarbonyl group or C<sub>2-9</sub> heteroarylcarbonyl group, wherein group (wherein each of the arylcarbonyl group or heteroarylcarbonyl group may be arbitrarily substituted with 1 to 3 R<sup>10</sup> wherein R<sup>10</sup> has the above-mentioned meaning; meaning); and~~

R<sup>8</sup> is

(i) hydrogen atom,

(ii) ~~C<sub>1-6</sub> alkyl group, wherein group (wherein the C<sub>1-6</sub> alkyl group may be arbitrarily substituted with: with~~

(1) halogen atom,

(2) hydroxy group,

(3) ~~C<sub>1-6</sub> alkoxy group, wherein group (wherein the alkoxy group may be arbitrarily substituted with halogen atom; atom);~~

(4) ~~C<sub>6-14</sub> aryl group or group, C<sub>2-9</sub> heteroaryl group, wherein group~~ (wherein each of the aryl group or heteroaryl group may be arbitrarily substituted with 1 to 3  $\underline{R^{17}}$ ,  $\underline{R^{17}}$  wherein  $\underline{R^{17}}$  has the same meaning as  $\underline{R^{10}}$ ,  $\underline{R^{10}}$ );

(5) C<sub>1-6</sub> alkylcarbonyloxy group; nitro group; cyano group; formyl group; formamide group; amino group; C<sub>1-6</sub> alkylamino group; di-C<sub>1-6</sub> alkylamino group; C<sub>1-6</sub> alkylcarbonylamino group; C<sub>1-6</sub> alkylsulfonylamino group; aminocarbonyl group; C<sub>1-6</sub> alkylaminocarbonyl group; di-C<sub>1-6</sub> alkylaminocarbonyl group; C<sub>1-6</sub> alkylcarbonyl group; C<sub>1-6</sub> alkoxy carbonyl group; aminosulfonyl group; C<sub>1-6</sub> alkylsulfonyl group; carboxy group or sulfonyl ~~group, group~~;

(iii) ~~C<sub>6-14</sub> aryl group or group, C<sub>2-9</sub> heteroaryl group, wherein group~~ (wherein each of the aryl group or heteroaryl group may be arbitrarily substituted with 1 to 3  $\underline{R^{17}}$ ,  $\underline{R^{17}}$  wherein  $\underline{R^{17}}$  has the same meaning as  $\underline{R^{10}}$ ,  $\underline{R^{10}}$ );

(iv) hydroxy group;

(v) C<sub>1-6</sub> alkoxy ~~group, wherein group~~ (wherein the alkoxy group may be arbitrarily substituted with halogen ~~atom, atom~~); or

(vi) nitro group; cyano group; formyl group; formamide group; sulfonylamino group; sulfonyl group; amino group; C<sub>1-6</sub> alkylamino group; di-C<sub>1-6</sub> alkylamino group; C<sub>1-6</sub> alkylcarbonylamino group; C<sub>1-6</sub> alkylsulfonylamino group; aminocarbonyl group; C<sub>1-6</sub> alkylaminocarbonyl group; di-C<sub>1-6</sub> alkylaminocarbonyl group; C<sub>1-6</sub> alkylcarbonyl group; C<sub>1-6</sub> alkoxy carbonyl group; aminosulfonyl group; C<sub>1-6</sub> alkylsulfonyl group; carboxy group, C<sub>6-14</sub> arylcarbonyl group or C<sub>2-9</sub> heteroarylcarbonyl ~~group, wherein group~~ (wherein each of the arylcarbonyl group or heteroarylcarbonyl group may be arbitrarily substituted with 1 to 3  $\underline{R^{17}}$ ,  $\underline{R^{17}}$  wherein  $\underline{R^{17}}$  has the same meaning as  $\underline{R^{10}}$ , or  $\underline{R^{10}}$ ), or

$R^7$  together with  $R^8$  may represent =O or =S, or

V is  $NR^9$  wherein  $R^9$  is

(i) ~~hydrogen atom, atom or~~

(ii)  ~~$C_{1-6}$  alkyl group, wherein group (wherein the alkyl group may be arbitrarily substituted with: with~~

(1) ~~halogen atom,~~

(2)  ~~$C_{1-6}$  alkoxy group, wherein group (wherein the alkoxy group may be arbitrarily substituted with a halogen atom, atom);~~

(3) ~~hydroxy group,~~

(4)  ~~$C_{6-14}$  aryl group or  $C_{2-9}$  heteroaryl group, wherein group (wherein each of the aryl group or heteroaryl group may be arbitrarily substituted with 1 to 3  $R^{17}$ ,  $R^{17}$  wherein  $R^{17}$  has the same meaning as  $R^{10}$ ,  $R^{10}$ );~~

(6)  ~~$C_{1-6}$  alkylaminocarbonyl group, di- $C_{1-6}$  alkylaminocarbonyl group,  $C_{1-6}$  alkylcarbonyl group,  $C_{3-8}$  cycloalkylcarbonyl group,  $C_{1-6}$  alkoxy carbonyl group,  $C_{1-6}$  alkylsulfonyl group, carboxy group,  $C_{6-14}$  arylsulfonyl group or  $C_{2-9}$  heteroarylsulfonyl group, group);~~

(iii)  ~~$C_{1-6}$  alkylaminocarbonyl group, di- $C_{1-6}$  alkylaminocarbonyl group,  $C_{1-6}$  alkylcarbonyl group,  $C_{3-8}$  cycloalkylcarbonyl group,  $C_{1-6}$  alkoxy carbonyl group,  $C_{1-6}$  alkylsulfonyl group,~~

(iv)  ~~$C_{6-14}$  arylsulfonyl group or group,  $C_{2-9}$  heteroarylsulfonyl group, wherein group (wherein each of the arylsulfonyl group or heteroarylsulfonyl group may be arbitrarily substituted with 1 to 3  $R^{17}$ ,  $R^{17}$  wherein  $R^{17}$  has the same meaning as  $R^{10}$ ,  $R^{10}$ );~~

(v) ~~carboxy group;~~

(vi)  ~~$C_{6-14}$  arylcarbonyl group or group,  $C_{2-9}$  heteroarylcarbonyl group, wherein group (wherein each of the arylcarbonyl group or heteroarylcarbonyl group may be~~

arbitrarily substituted with 1 to 3  $R^{17}$ ,  $R^{17}$  wherein  $R^{17}$  has the same meaning as  $R^{10}$ ;  $R^{16}$ ;

(vii) or O, S, SO or SO<sub>2</sub>;

$R^5$  is hydrogen atom or C<sub>1-6</sub> alkyl group, wherein group (wherein the alkyl group may be arbitrarily substituted with

(i) halogen atom,

(ii) C<sub>1-6</sub> alkoxy group, wherein group (wherein the alkoxy group may be arbitrarily substituted with halogen atom, or atom), or

(iii) hydroxy group, group); and

$R^6$  is

(i) hydrogen atom,

(ii) C<sub>1-6</sub> alkyl group, wherein group (wherein the alkyl group may be arbitrarily substituted with: with

(1) halogen atom,

(2) C<sub>1-6</sub> alkoxy group, wherein group (wherein the alkoxy group may be arbitrarily substituted with halogen atom, atom),

(3) amino group,

(4) carboxy group or

(5) hydroxy group, group);

(iii) C<sub>3-8</sub> cycloalkyl group or group, C<sub>3-8</sub> cycloalkenyl group, wherein group (wherein the cycloalkyl group or cycloalkenyl group may be arbitrarily substituted with: with

(1) halogen atom,

(2) C<sub>1-6</sub> alkyl group, wherein group (wherein the alkyl group may be arbitrarily substituted with: with

(a) halogen atom,

(b) C<sub>1-6</sub> alkoxy group, wherein group (~~wherein the alkoxy group may be arbitrarily substituted with halogen atom, atom~~);

(c) amino group,

(d) carboxy group or

(e) hydroxy group, group;

(3) C<sub>1-6</sub> alkoxy group, wherein group (~~wherein the alkoxy group may be arbitrarily substituted with halogen atom, atom~~);

(4) amino,

(5) carboxy group or

(6) hydroxy group, group;

(iv) amino group, C<sub>1-6</sub> alkylamino group, di-C<sub>1-6</sub> alkylamino group,

(v) C<sub>6-14</sub> arylamino group or group, C<sub>2-9</sub> heteroaryl amino group, wherein group (~~wherein each of the arylamino group or heteroaryl amino group may be arbitrarily substituted with 1 to 3 R<sup>18</sup>, R<sup>18</sup> wherein R<sup>18</sup> has the same meaning as R<sup>10</sup>~~;

(v) C<sub>6-14</sub> aryl group or group, C<sub>2-9</sub> heteroaryl group, wherein group (~~wherein each of the aryl group or heteroaryl group may be arbitrarily substituted with 1 to 3 R<sup>18</sup>, R<sup>18</sup> wherein R<sup>18</sup> has the same meaning as R<sup>10</sup>~~; or

(vi) C<sub>2-9</sub> heterocyclyl ~~heterocyclyl~~ group, wherein group (~~wherein the heterocyclyl group may be arbitrarily substituted with~~ with

(1) halogen atom,

(2) C<sub>1-6</sub> alkyl group, wherein group (~~wherein the alkyl group may be arbitrarily substituted with~~ with

(a) halogen atom,

(b) C<sub>1-6</sub> alkoxy group, wherein group (~~wherein the alkoxy group may be arbitrarily substituted with halogen atom, atom~~);



(c) amino group,

(d) carboxy group or

(e) hydroxy group, group);

(3) C<sub>1-6</sub> alkoxy group, wherein group (wherein the alkoxy group may be arbitrarily substituted with halogen atom, atom);

(4) C<sub>6-14</sub> aryl group or group, C<sub>2-9</sub> heteroaryl group, wherein group (wherein each of the aryl group or heteroaryl group may be arbitrarily substituted with 1 to 3 R<sup>18</sup>, R<sup>18</sup>-wherein R<sup>18</sup> has the same meaning as R<sup>10</sup>, R<sup>10</sup>);

(5) hydroxy group, nitro group, cyano group, formyl group, formamide group, amino group, C<sub>1-6</sub> alkylamino group, di-C<sub>1-6</sub> alkylamino group, C<sub>1-6</sub> alkylcarbonylamino group, C<sub>1-6</sub> alkylsulfonylamino group, aminocarbonyl group, C<sub>1-6</sub> alkylaminocarbonyl group, di-C<sub>1-6</sub> alkylaminocarbonyl group, C<sub>1-6</sub> alkylcarbonyl group, C<sub>1-6</sub> alkoxycarbonyl group; aminosulfonyl group, C<sub>1-6</sub> alkylsulfonyl group, carboxy group or C<sub>6-14</sub> arylcarbonyl group, group);



(3) hydroxy group,

(4) ~~C<sub>6-14</sub> aryl group or group, C<sub>2-9</sub> heteroaryl group, wherein group~~ (wherein each of the aryl group or heteroaryl group may be arbitrarily substituted with 1 to 3 R<sup>19</sup>, R<sup>19</sup> wherein R<sup>19</sup> has the same meaning as R<sup>10</sup>, R<sup>10</sup>);

(5) C<sub>1-6</sub> alkylaminocarbonyl group, di-C<sub>1-6</sub> alkylaminocarbonyl group, C<sub>1-6</sub> alkylcarbonyl group, C<sub>3-8</sub> cycloalkylcarbonyl group, C<sub>1-6</sub> alkoxy carbonyl group, C<sub>1-6</sub> alkylsulfonyl group, carboxy group, C<sub>6-14</sub> arylcarbonyl group or C<sub>2-9</sub> heteroarylcarbonyl ~~group, group~~);

(iii) ~~C<sub>6-14</sub> aryl group or group, C<sub>2-9</sub> heteroaryl group, wherein group~~ (wherein each of the aryl group or heteroaryl group may be arbitrarily substituted with 1 to 3 R<sup>19</sup>, R<sup>19</sup> wherein R<sup>19</sup> has the same meaning as R<sup>10</sup>, R<sup>10</sup>);

(iv) C<sub>1-6</sub> alkylaminocarbonyl group, di-C<sub>1-6</sub> alkylaminocarbonyl group, C<sub>1-6</sub> alkylcarbonyl group, C<sub>3-8</sub> cycloalkylcarbonyl group, C<sub>1-6</sub> alkoxy carbonyl group, C<sub>1-6</sub> alkylsulfonyl group,

(v) ~~C<sub>6-14</sub> arylsulfonyl group or group, C<sub>2-9</sub> heteroarylsulfonyl group, wherein group~~ (wherein each of the arylsulfonyl group or heteroarylsulfonyl group may be arbitrarily substituted with 1 to 3 R<sup>19</sup> wherein R<sup>19</sup> has the same meaning as R<sup>10</sup>, R<sup>10</sup>);

(vi) carboxy group;

(vii) ~~C<sub>6-14</sub> arylcarbonyl group or group, C<sub>2-9</sub> heteroarylcarbonyl group, wherein group~~ (wherein each of the arylcarbonyl group or heteroarylcarbonyl group may be arbitrarily substituted with 1 to 3 R<sup>19</sup> wherein R<sup>19</sup> has the same meaning as R<sup>10</sup>, R<sup>10</sup>);

R<sup>13</sup>, R<sup>14</sup>, R<sup>15</sup> and R<sup>16</sup> are, independently of each other,

(i) hydrogen atom,

(ii) halogen atom,

(iii) C<sub>1-6</sub> alkyl group, wherein group (~~wherein the alkyl group may be arbitrarily substituted with:~~ with

(1) halogen atom,

(2) C<sub>1-6</sub> alkoxy group, wherein group (~~wherein the alkoxy group may be arbitrarily substituted with halogen atom, atom;~~

(3) amino group,

(4) hydroxy group,

(5) C<sub>6-14</sub> aryl group or group, C<sub>2-9</sub> heteroaryl group, wherein group (~~wherein each of the aryl group or heteroaryl group may be arbitrarily substituted with 1 to 3  $\text{R}^{20}$ ,  $\text{R}^{20}$ -wherein  $\text{R}^{20}$  has the same meaning as  $\text{R}^{10}$ ,  $\text{R}^{10}$ ;~~

(6) C<sub>1-6</sub> alkylaminocarbonyl group, di-C<sub>1-6</sub> alkylaminocarbonyl group, C<sub>1-6</sub> alkylcarbonyl group, C<sub>3-8</sub> cycloalkylcarbonyl group, C<sub>1-6</sub> alkoxycarbonyl group, C<sub>1-6</sub> alkylsulfonyl group, carboxy group, C<sub>6-14</sub> arylcarbonyl group or C<sub>2-9</sub> heteroarylcarbonyl group, group;

(iv) C<sub>1-6</sub> alkoxy group, wherein group (~~wherein the alkoxy group may be arbitrarily substituted with halogen atom, (wherein the alkoxy group may be arbitrarily substituted with halogen atom, atom);~~

(v) carboxy group,

(vi) amino group,

(vii) hydroxy group,

(viii) C<sub>6-14</sub> aryl group or C<sub>2-9</sub> heteroaryl group, wherein group (~~wherein each of the aryl group or heteroaryl group may be arbitrarily substituted with 1 to 3  $\text{R}^{20}$ ,  $\text{R}^{20}$ -wherein  $\text{R}^{20}$  has the same meaning as  $\text{R}^{10}$ ,  $\text{R}^{10}$ ;~~

(ix) C<sub>1-6</sub> thioalkoxy group, wherein group (~~wherein the thioalkoxy group may be arbitrarily substituted with:~~ with

(1) halogen atom,

(2) C<sub>1-6</sub> alkoxy group, ~~wherein group (wherein the alkoxy group may be arbitrarily substituted with halogen atom, atom);~~

(3) carboxy group,

(4) hydroxy group,

(5) C<sub>6-14</sub> aryl group or C<sub>2-9</sub> heteroaryl group, ~~wherein group (wherein each of the aryl group or heteroaryl group may be arbitrarily substituted with 1 to 3 R<sup>20</sup>, R<sup>20</sup> wherein R<sup>20</sup> has the same meaning as R<sup>10</sup>, R<sup>10</sup>);~~

~~hydroxy group, C<sub>6-14</sub> aryl group or C<sub>2-9</sub> heteroaryl group (wherein each of the aryl group or heteroaryl group may be arbitrarily substituted with 1 to 3 R<sup>20</sup> wherein R<sup>20</sup> has the same meaning as R<sup>10</sup>);~~

(6) C<sub>1-6</sub> alkylcarbonyloxy group, nitro group, cyano group, formyl group, formamide group, amino group, sulfonyl group, C<sub>1-6</sub> alkylamino group, di-C<sub>1-6</sub> alkylamino group,

(7) C<sub>6-14</sub> arylamino group or group, C<sub>2-9</sub> heteroaryl amino group, ~~wherein group (wherein each of the arylamino group or heteroaryl amino group may be arbitrarily substituted with 1 to 3 R<sup>20</sup>, R<sup>20</sup> wherein R<sup>20</sup> has the same meaning as R<sup>10</sup>, R<sup>10</sup>);~~

(8) C<sub>1-6</sub> alkylcarbonyloxyamino group, C<sub>1-6</sub> alkylsulfonylamino group, aminocarbonyl group, C<sub>1-6</sub> alkylaminocarbonyl group, di-C<sub>1-6</sub> alkylaminocarbonyl group, C<sub>1-6</sub> alkylcarbonyl group,

(9) C<sub>6-14</sub> arylcarbonyl group or group, C<sub>2-9</sub> heteroarylcarbonyl group, ~~wherein group (wherein each of the arylcarbonyl group or heteroarylcarbonyl group may be arbitrarily substituted with 1 to 3 R<sup>20</sup>, R<sup>20</sup> wherein R<sup>20</sup> has the same meaning as R<sup>10</sup>, R<sup>10</sup>);~~

(10) C<sub>1-6</sub> alkoxycarbonyl group, aminosulfonyl group, C<sub>1-6</sub> alkylsulfonyl group,

(11) C<sub>6-14</sub> arylsulfonyl ~~group or group~~, C<sub>2-9</sub> heteroaryl sulfonyl ~~group, wherein group (wherein~~ each of the arylsulfonyl group or heteroaryl sulfonyl group may be arbitrarily substituted with 1 to 3  $R^{20}$ ,  $R^{20}$  wherein  $R^{20}$  has the same meaning as  $R^{10}$ ,  $R^{10}$ );

(12) carboxy group,

(13) sulfonyl group or

(14) C<sub>2-9</sub> ~~heterocyclyl group, wherein heterocyclyl group (wherein the~~ heterocyclyl group may be arbitrarily substituted ~~with: with~~

(a) halogen atom,

(b) C<sub>1-6</sub> alkyl ~~group, wherein group (wherein the alkyl group may be~~ arbitrarily substituted ~~with: with~~

(A) halogen atom,

(B) C<sub>1-6</sub> alkoxy ~~group, wherein group (wherein the alkoxy~~ group may be arbitrarily substituted with halogen ~~atom, atom~~);

(C) amino group,

(D) carboxy group or

(E) hydroxy ~~group, group~~);

(c) C<sub>1-6</sub> alkoxy ~~group, wherein group (wherein the alkoxy group may~~ be arbitrarily substituted with halogen ~~atom, atom~~);

(d) C<sub>6-14</sub> aryl ~~group or group~~, C<sub>2-9</sub> heteroaryl ~~group, wherein group~~ (wherein each of the aryl group or heteroaryl group may be arbitrarily substituted with 1 to 3  $R^{20}$ ,  $R^{20}$  wherein  $R^{20}$  has the same meaning as  $R^{10}$ ,  $R^{10}$ );

(e) hydroxy group, nitro group, cyano group, formyl group, formamide group, amino group, C<sub>1-6</sub> alkylamino group, di-C<sub>1-6</sub> alkylamino group, C<sub>1-6</sub> alkylcarbonylamino group, C<sub>1-6</sub> alkylsulfonylamino group, aminocarbonyl group, C<sub>1-6</sub> alkylaminocarbonyl group, di-C<sub>1-6</sub> alkylaminocarbonyl group, C<sub>1-6</sub> alkylcarbonyl group, C<sub>1-6</sub> alkoxycarbonyl group, aminosulfonyl group, C<sub>1-6</sub> alkylsulfonyl group, carboxy group or C<sub>6-14</sub> arylcarbonyl group, and group;

X is O, S, SO or SO<sub>2</sub>.

2. (Canceled)

3. (Previously Presented) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 1, wherein R<sup>1</sup> and R<sup>2</sup> are methyl group, R<sup>3</sup> is hydroxy group, and R<sup>4</sup> is hydrogen atom.

4. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 3, wherein R<sup>5</sup> is hydrogen atom, m is an integer of 0 to 3 and n is an integer of 0 to 2.

5. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 4, wherein V is a single bond.

6. (Currently Amended) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 5, wherein m is an integer of 1 to 3, n is 0, and R<sup>6</sup> is C<sub>6-14</sub> aryl group wherein the aryl group may be ~~arbitrarily~~ substituted with 1 to 3 R<sup>18</sup> wherein R<sup>18</sup> has the same meaning as R<sup>10</sup>.

7. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 6, wherein m is 2.

8. (Currently Amended) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 7, wherein R<sup>6</sup> is C<sub>6-14</sub> aryl group wherein the aryl

group may be ~~arbitrarily~~ substituted with 1 to 3 halogen atom or amino group, when and when a plurality of substituents are present, they may be identical or different from each other.

9. (Currently Amended) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 5, wherein m is an integer of 1 to 3, n is 0, and R<sup>6</sup> is C<sub>2-9</sub> heteroaryl group wherein the heteroaryl group may be ~~arbitrarily~~ substituted with 1 to 3 R<sup>18</sup> wherein R<sup>18</sup> has the same meaning as R<sup>10</sup>.

10. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 9, wherein m is 2.

11. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 10, wherein R<sup>6</sup> is 2-pyridyl group, 3-pyridyl group or 4-pyridyl group.

12. (Currently Amended) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 5, wherein m is an integer of 1 to 3, n is 0, and R<sup>6</sup> is: is

(i) C<sub>2-4</sub> alkyl group, wherein group (~~wherein the alkyl group may be arbitrarily substituted with: with~~

(1) halogen atom,

(2) C<sub>1-6</sub> alkoxy group, wherein group (~~wherein the alkoxy group may be arbitrarily substituted with halogen atom, atom);~~

(3) amino group,

(4) carboxy group or

(5) hydroxy group, group;

(ii) C<sub>1-6</sub> alkoxy group, wherein group (~~wherein the alkoxy group may be arbitrarily substituted with halogen atom, atom~~);

(iii) amino group,



(iv) carboxy group, group or

(v) hydroxy group, group,

(vi) C<sub>3-8</sub> cycloalkyl group or group, C<sub>3-8</sub> cycloalkenyl group, wherein group (wherein the cycloalkyl group or cycloalkenyl group may be arbitrarily substituted with: with

(1) halogen atom,

(2) C<sub>1-6</sub> alkyl group, wherein group (wherein the alkyl group may be arbitrarily substituted with: with

(a) halogen atom,

(b) C<sub>1-6</sub> alkoxy group, wherein group (wherein the alkoxy group may be arbitrarily substituted with halogen atom, atom),

(c) amino group,

(d) carboxy group or

(e) hydroxy group, group),

(3) C<sub>1-6</sub> alkoxy group, wherein group (wherein the alkoxy group may be arbitrarily substituted with halogen atom, atom),

(4) amino group,

(5) carboxy group or

(6) hydroxy group, group),

(vii) or C<sub>2-9</sub> heterocyclyl group, wherein group (wherein the heterocyclyl group may be arbitrarily substituted with: with

(1) halogen atom,

(2) C<sub>1-6</sub> alkyl group, wherein group (wherein the alkyl group may be arbitrarily substituted with: with

(a) halogen atom,

(b) C<sub>1-6</sub> alkoxy group, wherein group (wherein the alkoxy group may

be ~~arbitrarily~~ substituted with halogen ~~atom, atom~~;

(c) amino group,

(d) carboxy group or

(e) hydroxy ~~group, group~~;

(3) C<sub>1-6</sub> alkoxy ~~group, wherein group~~ (~~wherein~~ the alkoxy group may be ~~arbitrarily~~ substituted with halogen ~~atom, atom~~);

(4) hydroxy group or

(5) amino ~~group, group~~).

13. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 12, wherein m is 2.

14. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 13, wherein R<sup>6</sup> is n-propyl group, i-propyl group, c-pentyl group, c-hexyl group, 1-c-pentenyl group, 2-c-pentenyl group, 3-c-pentenyl group, 1-c-hexenyl group, 2-c-hexenyl group or 3-c-hexenyl group.

15. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 4, wherein V is CR<sup>7</sup>R<sup>8</sup>.

16. (Currently Amended) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 15, wherein R<sup>7</sup> is: is

(i) hydroxy group,

(ii) C<sub>1-6</sub> alkyl ~~group, wherein group~~ (~~wherein~~ the alkyl group may be ~~arbitrarily~~ substituted ~~with;~~ with

(1) halogen atom,

(2) C<sub>1-6</sub> alkoxy ~~group, wherein group~~ (~~wherein~~ the alkoxy group may be ~~arbitrarily~~ substituted with halogen ~~atom, atom~~);

(3) amino group,

(4) carboxy group or

(5) hydroxy ~~group, group~~;

(iii) C<sub>1-6</sub> alkoxy ~~group, wherein group~~ (wherein the alkoxy group may be arbitrarily substituted with halogen ~~atom, atom~~);

(iv) C<sub>1-6</sub> alkylamino group,

(v) di-C<sub>1-6</sub> alkylamino group, or

(vi) carboxy group, and

R<sup>8</sup> is hydrogen atom or C<sub>1-6</sub> alkyl ~~group, wherein group~~ (wherein the alkyl group may be arbitrarily substituted ~~with~~ with

(i) halogen atom,

(ii) C<sub>1-6</sub> alkoxy ~~group, wherein group~~ (wherein the alkoxy group may be arbitrarily substituted with halogen ~~atom, atom~~);

(iii) amino group,

(iv) carboxy group or

(v) hydroxy ~~group, group~~; or

R<sup>7</sup> and R<sup>8</sup> together are =O or =S.

17. (Currently Amended) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 16, wherein R<sup>7</sup> is: is

(i) hydroxy group,

(ii) C<sub>1-6</sub> alkyl ~~group, wherein group~~ (wherein the alkyl group may be arbitrarily substituted with halogen atom, hydroxy group or carboxy ~~group, group~~) or

(iii) carboxy group, and

R<sup>8</sup> is hydrogen atom or C<sub>1-6</sub> alkyl ~~group, wherein group~~ (wherein the alkyl group may be arbitrarily substituted with halogen atom, hydroxy group or carboxy ~~group, group~~); or

R<sup>7</sup> and R<sup>8</sup> together are =O.

18. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 17, wherein  $R^7$  is hydroxy group, and  $R^8$  is hydrogen atom.

19. (Currently Amended) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 15, wherein m is an integer of 1 to 2, n is 0, and  $R^6$  is  $C_{6-14}$  aryl group or  $C_{2-9}$  heteroaryl wherein each of the aryl group or heteroaryl group may be arbitrarily substituted with 1 to 3  $R^{18}$  wherein  $R^{18}$  has the same meaning as  $R^{10}$ .

20. (Currently Amended) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 19, wherein  $R^7$  is: is

(i) hydroxy group,

(ii)  $C_{1-6}$  alkyl group, wherein group (~~wherein the alkyl group may be arbitrarily substituted with~~ with

(1) halogen atom,

(2)  $C_{1-6}$  alkoxy group, wherein group (~~wherein the alkoxy group may be arbitrarily substituted with halogen atom, atom~~);

(3) amino group,

(4) carboxy group or

(5) hydroxy group, group);

(iv)  $C_{1-6}$  alkoxy group, wherein group (~~wherein the alkoxy group may be arbitrarily substituted with halogen atom, atom~~);

(v)  $C_{1-6}$  alkylamino group,

(vi) di- $C_{1-6}$  alkylamino group, or

(vii) carboxy group, and

$R^8$  is hydrogen atom or  $C_{1-6}$  alkyl group, wherein group (~~wherein the alkyl group may be arbitrarily substituted with~~ with

(i) halogen atom,

(ii) C<sub>1-6</sub> alkoxy ~~group, wherein group~~ (wherein the alkoxy group may be arbitrarily substituted with halogen atom, ~~atom~~);

(iii) amino group,

(iv) carboxy group or

(v) hydroxy ~~group, group~~; or

R<sup>7</sup> and R<sup>8</sup> together are =O or =S.

21. (Currently Amended) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 20, wherein R<sup>7</sup> ~~is~~ is:

(i) hydroxy group,

(ii) C<sub>1-6</sub> alkyl ~~group, wherein group~~ (wherein the alkyl group may be arbitrarily substituted with halogen atom, hydroxy group or carboxy ~~group, group~~) or

(iii) carboxy group, and

R<sup>8</sup> is hydrogen atom or C<sub>1-6</sub> alkyl ~~group, wherein group~~ (wherein the alkyl group may be arbitrarily substituted with halogen atom, hydroxy group or carboxy ~~group, group~~); or R<sup>7</sup> and R<sup>8</sup> together are =O.

22. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 21, wherein R<sup>7</sup> is hydroxy group, and R<sup>8</sup> is hydrogen atom.

23. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 22, wherein m is 1, n is 0, and R<sup>6</sup> is C<sub>6-14</sub> aryl ~~group, wherein group~~ (wherein the aryl group may be arbitrarily substituted with 1 to 3 halogen atom or amino group, ~~when~~ and when a plurality of substituents are present, they may be identical or different from each other).

24. (Currently Amended) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 15, wherein m is an integer of 1 to 2, n is 0, and

R<sup>6</sup> is: is

(i) C<sub>1-4</sub> alkyl group, wherein group (~~wherein the alkyl group may be arbitrarily substituted with:~~ with)

(1) halogen atom,

(2) C<sub>1-6</sub> alkoxy group, wherein group (~~wherein the alkoxy group may be arbitrarily substituted with halogen~~ atom, atom);

(3) amino group,

(4) carboxy group or

(5) hydroxy group, group);

(ii) C<sub>3-8</sub> cycloalkyl group or group, C<sub>3-8</sub> cycloalkenyl group, wherein group (~~wherein the cycloalkyl group or cycloalkenyl group may be arbitrarily substituted with:~~ with)

(1) halogen atom,

(2) C<sub>1-6</sub> alkyl group, wherein group (~~wherein the alkyl group may be arbitrarily substituted with:~~ with);

(a) halogen atom,

(b) C<sub>1-6</sub> alkoxy group, wherein group (~~wherein the alkoxy group may be arbitrarily substituted with halogen~~ atom, atom);

(c) amino group,

(d) carboxy group or

(e) hydroxy group, group);

(3) C<sub>1-6</sub> alkoxy group, wherein group (~~wherein the alkoxy group may be arbitrarily substituted with halogen~~ atom, atom);

(3) amino group,

(4) carboxy group or

(5) hydroxy group, group); or

(iii) C<sub>2-9</sub> heterocyclyl group, wherein heterocyclyl group (~~wherein the heterocyclyl group~~) may be ~~arbitrarily~~ substituted with: with

(1) halogen atom,

(2) C<sub>1-6</sub> alkyl group, wherein group (~~wherein the alkyl group may be arbitrarily~~) substituted with: with

(a) halogen atom,

(b) C<sub>1-6</sub> alkoxy group, wherein group (~~wherein the alkoxy group may be arbitrarily~~) substituted with halogen atom, atom;

(c) amino group,

(d) carboxy group or hydroxy group, group;

(3) C<sub>1-6</sub> alkoxy group, wherein group (~~wherein the alkoxy group may be arbitrarily~~) substituted with halogen atom, atom;

(4) amino group,

(5) carboxy group or

(6) hydroxy group, group;

25. (Currently Amended) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 24, wherein R<sup>7</sup> is: is

(i) hydroxy group,

(ii) C<sub>1-6</sub> alkyl group, wherein group (~~wherein the alkyl group may be arbitrarily~~) substituted with: with

(1) halogen atom,

(2) C<sub>1-6</sub> alkoxy group, wherein group (~~wherein C<sub>1-6</sub> alkoxy group may be arbitrarily~~) substituted with halogen atom, atom;

(3) amino group,

(4) carboxy group or

(5) ~~hydroxy group, group~~;

(iii) C<sub>1-6</sub> alkoxy ~~group, wherein group~~ (~~wherein~~ C<sub>1-6</sub> alkoxy group may be arbitrarily substituted with halogen ~~atom, atom~~);

(iv) C<sub>1-6</sub> alkylamino group,

(v) di-C<sub>1-6</sub> alkylamino group, or

(vi) carboxy group, and

R<sup>8</sup> is

(i) hydrogen atom or

(ii) C<sub>1-6</sub> alkyl ~~group, wherein group~~ (~~wherein~~ the alkyl group may be arbitrarily substituted ~~with: with~~);

(iii) halogen atom,

(iv) C<sub>1-6</sub> alkoxy ~~group, wherein group~~ (~~wherein~~ C<sub>1-6</sub> alkoxy group may be arbitrarily substituted with halogen ~~atom, atom~~);

(v) amino group,

(vi) carboxy group or

(vii) ~~hydroxy group, group~~); or

R<sup>7</sup> and R<sup>8</sup> together are =O or =S.

26. (Currently Amended) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 25, wherein R<sup>7</sup> is: is

(i) hydroxy group,

(ii) C<sub>1-6</sub> alkyl ~~group, wherein group~~ (~~wherein~~ the alkyl group may be arbitrarily substituted ~~with: with~~);

(1) halogen atom,

(2) hydroxy group or

(3) ~~carboxy group, group~~); or



(iii) carboxy group, and

R<sup>8</sup> is hydrogen atom or C<sub>1-6</sub> alkyl group, wherein group (~~wherein the alkyl group may be arbitrarily substituted with halogen atom, hydroxy group or carboxy group, group~~); or R<sup>7</sup> and R<sup>8</sup> together are =O.

27. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 26, wherein R<sup>7</sup> is hydroxy group, and R<sup>8</sup> is hydrogen atom.

28. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 27, wherein R<sup>6</sup> is n-propyl group, i-propyl group, c-pentyl group, c-hexyl group, 1-c-pentenyl group, 2-c-pentenyl group, 3-c-pentenyl group, 1-c-hexenyl group, 2-c-hexenyl group or 3-c-hexenyl group.

29. (Currently Amended) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 15, wherein R<sup>7</sup> and R<sup>8</sup> together are =O or =S, and R<sup>6</sup> is: is

(i) amino group,

(ii) C<sub>1-6</sub> alkylamino group,

(iii) di-C<sub>1-6</sub> alkylamino group,

(iv) C<sub>6-14</sub> arylamino group or group, C<sub>2-9</sub> heteroaryl amino group, wherein (~~wherein~~ each of the arylamino group or heteroaryl amino group may be ~~arbitrarily~~ substituted with: with

(1) 1 to 3 R<sup>18</sup>, R<sup>18</sup>—wherein R<sup>18</sup> has the same meaning as R<sup>10</sup>, or

(2) C<sub>2-9</sub> heterocyclyl group, wherein heterocyclyl group (~~wherein the heterocyclyl group may be arbitrarily substituted with: with~~

(a) halogen atom,

(b) C<sub>1-6</sub> alkyl group, wherein group (~~wherein the alkyl group may be arbitrarily substituted with: with~~

(A) halogen atom,

(B) C<sub>1-6</sub> alkoxy group, wherein group (~~wherein the alkoxy group may be arbitrarily substituted with halogen atom, atom~~);

(C) amino group,

(D) carboxy group or

(E) hydroxy group, group;

(c) C<sub>1-6</sub> alkoxy group, wherein group (~~wherein the alkoxy group may be arbitrarily substituted with halogen atom, atom~~);

(d) amino group,

(e) carboxy group or

(f) hydroxy group, group;

30. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 4, wherein V is NR<sup>9</sup>.

31. (Currently Amended) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 30, wherein m is an integer of 1 to 3, n is 0, and R<sup>6</sup> is C<sub>6-14</sub> aryl group or C<sub>2-9</sub> heteroaryl group, wherein each of the aryl group or heteroaryl group may be arbitrarily substituted with 1 to 3 R<sup>18</sup>, R<sup>18</sup> wherein R<sup>18</sup> has the same meaning as R<sup>10</sup>.

32. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 31, wherein m is 2.

33. (Currently Amended) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 30, wherein m is an integer of 1 to 3, n is 0 and R<sup>6</sup> is: is

(i) hydrogen atom,

(ii) C<sub>2-4</sub> alkyl group, wherein group (~~wherein the alkyl group may be arbitrarily substituted with: with~~

(1) halogen atom,

(2) C<sub>1-6</sub> alkoxy group, wherein group (wherein the alkoxy group may be arbitrarily substituted with halogen atom, atom),

(3) amino group,

(4) carboxy group or

(5) hydroxy group, group),

(iii) C<sub>3-8</sub> cycloalkyl group or group, C<sub>3-8</sub> cycloalkenyl group, wherein group (wherein the cycloalkyl group or cycloalkenyl group may be arbitrarily substituted with: with

(1) halogen atom,

(2) C<sub>1-6</sub> alkyl group, wherein group (wherein the alkyl group may be arbitrarily substituted with: with

(a) halogen atom,

(b) C<sub>1-6</sub> alkoxy group, wherein group (wherein the alkoxy group may be arbitrarily substituted with halogen atom, atom),

(c) amino group,

(d) carboxy group or

(e) hydroxy group, group),

(3) C<sub>1-6</sub> alkoxy group, wherein group (wherein the alkoxy group may be arbitrarily substituted with halogen atom, atom),

(4) amino,

(5) carboxy group or

(6) hydroxy group, group); or

(iv) C<sub>2-9</sub> heterocyclyl group, wherein group (wherein the heterocyclyl may be arbitrarily substituted with: with

(1) halogen atom,

(2) C<sub>1-6</sub> alkyl group, wherein group (~~wherein the alkyl group may be arbitrarily substituted with:~~ with

(a) halogen atom,

(b) C<sub>1-6</sub> alkoxy group, wherein group (~~wherein the alkoxy group may be arbitrarily substituted with halogen atom, atom~~);

(c) amino group,

(d) carboxy group or

(e) hydroxy group, group);

(3) C<sub>1-6</sub> alkoxy group, wherein group (~~wherein the alkoxy group may be arbitrarily substituted with halogen atom, atom~~);

(4) amino group,

(5) carboxy group or

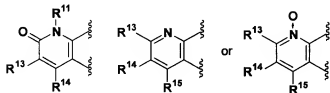
(6) hydroxy group, group);

34. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 33, wherein m is 2.

35. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 3, which is the compound of formula (I).

36. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 3, which is the compound of formula (II).

37. (Previously Presented) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 8, wherein the ring structure of A is



wherein R<sup>11</sup>, R<sup>13</sup>, R<sup>14</sup> and R<sup>15</sup> have the above-mentioned meanings.

38. (Currently Amended) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 37, wherein R<sup>11</sup> is: is

(i) hydrogen atom or

(ii) C<sub>1-6</sub> alkyl group, wherein group (~~wherein the alkyl group may be arbitrarily~~ substituted with: ~~with~~

(1) halogen atom,

(2) C<sub>1-6</sub> alkoxy group, wherein group (~~wherein the alkoxy group may be arbitrarily~~ substituted with halogen atom, atom);

(3) amino group or

(4) hydroxy group, group); and

R<sup>13</sup>, R<sup>14</sup> and R<sup>15</sup> are independently of each other

(i) hydrogen atom,

(ii) halogen atom,

(iii) C<sub>1-6</sub> alkyl group, wherein group (~~wherein the alkyl group may be arbitrarily~~ substituted with: ~~with~~

(1) halogen atom,

(2) C<sub>1-6</sub> alkoxy group, wherein group (~~wherein the alkoxy group may be arbitrarily~~ substituted with halogen atom atom) or

(3) amino group, or

(4) hydroxy group, group);

(iv) C<sub>1-6</sub> ~~cycloalkyl~~ C<sub>3-8</sub> cycloalkyl group, wherein group (~~wherein the cycloalkyl~~ group may be ~~arbitrarily~~ substituted with: ~~with~~

(1) halogen atom,

(2) ~~C<sub>1-6</sub> alkoxy group, wherein group~~ (wherein the alkoxy group may be arbitrarily substituted with halogen ~~atom, atom~~);

(3) amino group or

(4) ~~hydroxy group, group~~;

(v) ~~C<sub>1-6</sub> alkoxy group, wherein group~~ (wherein the alkoxy group may be arbitrarily substituted with: with

(1) halogen atom,

(2) amino group,

(3) ~~C<sub>1-6</sub> alkoxy group, wherein group~~ (wherein the alkoxy group may be arbitrarily substituted with halogen ~~atom, atom~~) or

(4) ~~hydroxy group, group~~;

(vi) C<sub>1-6</sub> alkylcarbonyl group,

(vii) aminocarbonyl group,

(viii) amino group,

(ix) carboxy group or

(x) cyano group.

39. (Currently Amended) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 38, wherein R<sup>11</sup> ~~is~~ is

(i) hydrogen atom or

(ii) ~~C<sub>1-6</sub> alkyl group, wherein group~~ (wherein the alkyl group may be arbitrarily substituted with halogen atom, amino group or hydroxy ~~group, group~~); and

R<sup>13</sup>, R<sup>14</sup> and R<sup>15</sup> are independently of each ~~other~~; other

(i) hydrogen atom,

(ii) halogen atom,

(iii) C<sub>1-6</sub> alkyl group, wherein group (~~wherein the alkyl group may be arbitrarily substituted with halogen atom, amino group or hydroxy group, group~~);

(iv) carboxy group,

(v) amino group or

(vi) cyano group.

40. (Currently Amended) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 39, wherein

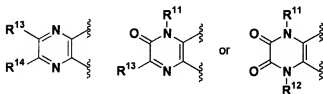
R<sup>11</sup> is hydrogen atom,

R<sup>13</sup> is hydrogen atom, halogen atom, carboxy group or C<sub>1-6</sub> alkyl group, wherein group (~~wherein the alkyl group may be arbitrarily substituted with halogen atom, amino group or hydroxy group, group~~);

R<sup>14</sup> is hydrogen atom, and

R<sup>15</sup> is hydrogen atom, halogen atom or C<sub>1-6</sub> alkyl group, wherein group (~~wherein the alkyl group may be arbitrarily substituted with halogen atom, amino group or hydroxy group, group~~).

41. (Previously Presented) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 8, wherein the ring structure of A is



wherein R<sup>11</sup>, R<sup>12</sup>, R<sup>13</sup> and R<sup>14</sup> have the above-mentioned meanings.

42. (Currently Amended) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 41, wherein R<sup>11</sup> and R<sup>12</sup> are independently of each other, other

(i) hydrogen atom or

(ii) C<sub>1-6</sub> alkyl group, wherein group (~~wherein the alkyl group may be arbitrarily substituted with:~~ ~~with~~)

(1) halogen atom,

(2) C<sub>1-6</sub> alkoxy group, wherein group (~~wherein the alkoxy group may be arbitrarily substituted with halogen atom, atom~~);

(3) amino group or

(4) hydroxy group, group); and

R<sup>13</sup> and R<sup>14</sup> are independently of each other

(i) hydrogen atom,

(ii) halogen atom,

(iii) C<sub>1-6</sub> alkyl group, wherein group (~~wherein the alkyl group may be arbitrarily substituted with:~~ ~~with~~)

(1) halogen atom,

(2) amino group,

(3) C<sub>1-6</sub> alkoxy group, wherein group (~~wherein the alkoxy group may be arbitrarily substituted with halogen atom, atom~~) or

(4) hydroxy group, group);

(iv) C<sub>1-6</sub> alkoxy group, wherein group (~~wherein the alkoxy group may be arbitrarily substituted with:~~ ~~with~~)

(1) halogen atom,

(2) amino group,

(3) C<sub>1-6</sub> alkoxy group, wherein group (~~wherein the alkoxy group may be arbitrarily substituted with halogen atom, atom~~); or

(4) hydroxy group, group);

(v) C<sub>1-6</sub> alkylcarbonyl group,



(vi) amino group or

(vii) cyano group.

43. (Currently Amended) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 42, wherein  $R^{11}$  and  $R^{12}$  are independently of each other; ~~other~~

(i) hydrogen atom or

(ii)  ~~$C_{1-6}$  alkyl group, wherein group (wherein the alkyl group may be arbitrarily~~ substituted with halogen atom, amino group or hydroxy ~~group, group~~); and  $R^{13}$  and  $R^{14}$  are independently of each ~~other; other~~

(i) hydrogen atom,

(ii) halogen atom,

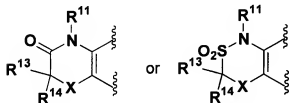
(iii)  ~~$C_{1-6}$  alkyl group, wherein group (wherein the alkyl group may be arbitrarily~~ substituted with halogen atom, amino group or hydroxy ~~group, group~~);

(iv) amino group or

(v) cyano group.

44. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 43, wherein  $R^{11}$ ,  $R^{12}$ ,  $R^{13}$  and  $R^{14}$  are hydrogen atom.

45. (Previously Presented) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 8, wherein the ring structure of A is



wherein  $R^{11}$ ,  $R^{13}$  and  $R^{14}$  have the above-mentioned meanings.

46. (Currently Amended) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 45, wherein R<sup>11</sup> ~~is~~ is

(i) hydrogen atom or

(ii) C<sub>1-6</sub> alkyl group, wherein group (~~wherein the alkyl group may be arbitrarily substituted with:~~ with

(1) halogen atom,

(2) C<sub>1-6</sub> alkoxy group, wherein group (~~wherein the alkoxy group may be arbitrarily substituted with halogen atom, atom~~);

(3) amino group or

(4) hydroxy group, group;

R<sup>13</sup> and R<sup>14</sup> are independently of each ~~other~~ other

(i) hydrogen atom,

(ii) halogen atom,

(iii) C<sub>1-6</sub> alkyl group, wherein group (~~wherein the alkyl group may be arbitrarily substituted with:~~ with

(1) halogen atom,

(2) amino group,

(3) C<sub>1-6</sub> alkoxy group, wherein group (~~wherein the alkoxy group may be arbitrarily substituted with halogen atom, atom~~) or

(4) hydroxy group, group;

(iv) C<sub>1-6</sub> alkoxy group, wherein group (~~wherein the alkoxy group may be arbitrarily substituted with:~~ with

(1) halogen atom,

(2) amino group,

(3) C<sub>1-6</sub> alkoxy group, wherein group (~~wherein the alkoxy group may be arbitrarily substituted with halogen atom, atom~~); or

(4) hydroxy group),

(v) amino group or

(vi) cyano group, and

X is O, S, SO or SO<sub>2</sub>.

47. (Currently Amended) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 46, wherein R<sup>11</sup> is: is

(i) hydrogen atom or

(ii) C<sub>1-6</sub> alkyl group, wherein group (~~wherein the alkyl group may be arbitrarily substituted with halogen atom, amino group or hydroxy group, group~~);

R<sup>13</sup> and R<sup>14</sup> are independently of each ~~other~~; other

(i) hydrogen atom,

(ii) halogen atom or

(iii) C<sub>1-6</sub> alkyl group, wherein group (~~wherein the alkyl group may be arbitrarily substituted with halogen atom, amino group or hydroxy group, group~~); and

X is O.

48. (Currently Amended) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 47, wherein

R<sup>11</sup> is hydrogen atom or C<sub>1-6</sub> alkyl group, wherein group (~~wherein the alkyl group may be arbitrarily substituted with halogen atom, amino group or hydroxy group, group~~);

R<sup>13</sup> and R<sup>14</sup> are hydrogen atom, and

X is O.

49-51. (Canceled)

52. (Currently Amended) A benzopyran derivative or pharmaceutically acceptable salt thereof which is

\_\_\_\_\_ 2,2,7,9-tetramethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,

\_\_\_\_\_ 2,2,7-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,

\_\_\_\_\_ 3-hydroxy-2,2,9-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-7-carbonitrile,

\_\_\_\_\_ 3-hydroxy-2,2,9-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-7-carboxamide,

\_\_\_\_\_ {3-hydroxy-2,2,9-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-7-yl} ethanone,

\_\_\_\_\_ 3,3-dimethyl-1-[(2-phenylethyl)amino]-2,3-dihydro-1*H*-pyrano[3,2-*f*]quinolin-2-ol,

\_\_\_\_\_ 7-hydroxymethyl-2,2,9-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,

\_\_\_\_\_ 3-hydroxy-2,2,9-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-carboxylic acid,

\_\_\_\_\_ 7-chloro-2,2,9-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,

\_\_\_\_\_ 4-(benzylamino)-7-chloro-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-4- {[2-(1,3-benzodioxol-5-yl)methyl]amino}-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-2,2,9-trimethyl-4-[(3-phenylpropyl)amino]-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-4-{{2-(4-fluorophenyl)ethyl}amino}-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-4-{{2-(2-fluorophenyl)ethyl}amino}-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-4-{{2-(4-chlorophenyl)ethyl}amino}-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,

\_\_\_\_\_ 4-{{2-(4-aminophenyl)ethyl}amino}-7-chloro-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-4-[(2-hydroxy-2-phenylethyl)amino]-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-4-(2-phenylbutyl)amino}-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-4-{{2-(1,3-benzodioxol-5-yl)ethyl}amino}-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-2,2,9-trimethyl-4-{{2-(1-piperidinyl)ethyl}amino}-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-2,2,9-trimethyl-4-{{2-(1-methyl-2-pyrrolidinyl)ethyl}amino}-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,

\_\_\_\_\_ 4-[(2-anilinoethyl)amino]-7-chloro-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-4-({2-[ethyl(3-methylphenyl)amino]ethyl}amino)-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-2,2,9-trimethyl-4-{{{1-ethyl-(*R*)-2-pyrrolidinyl)methyl}amino}-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-2,2,9-trimethyl-4-[(2,2-diethoxyethyl)amino]-3,4-dihydro-2*H*-pyrano[2,3-  
g]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-2,2,9-trimethyl-4-[[2-(3-thienyl)ethyl]amino]-3,4-dihydro-2*H*-pyrano[2,3-  
g]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-4-[2-(1-pyrazolylethyl)amino]-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-  
g]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-4-{{2-(4-methylpyrazol-1-yl)ethylamino}-2,2,9-trimethyl-3,4-dihydro-2*H*-  
pyrano[2,3-g]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-4-{{2-(4-chloropyrazol-1-yl)ethyl}amino}-2,2,9-trimethyl-3,4-dihydro-2*H*-  
pyrano[2,3-g]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-4-[2-(2-pyridylethyl)amino]-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-  
g]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-4-[2-(3-pyridylethyl)amino]-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-  
g]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-4-[2-(4-pyridylethyl)amino]-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-  
g]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-4-ethylamino-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-g]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-4-isobutylamino-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-g]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-4-[(cyclopropylmethyl)amino]-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-  
g]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-4-isoamylamino-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-g]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-4-[2-(cyclopentylethyl)amino]-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-  
g]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-4-[2-(1-cyclopentenylethyl)amino]-2,2,9-trimethyl-3,4-dihydro-2*H*-  
pyrano[2,3-g]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-2,2,9-trimethyl-4-[(1,4-dimethylpentyl)amino]-3,4-dihydro-2*H*-pyrano[2,3-  
g]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-2,2,9-trimethyl-4-(pentylamino)-3,4-dihydro-2*H*-pyrano[2,3-g]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-4-[(2-cyclohexylethyl)amino]-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-  
g]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-2,2,9-trimethyl-4-[(2-tetrahydro-2*H*-pyran-4-ylethyl)amino]-3,4-dihydro-2*H*-  
pyrano[2,3-g]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-2,2,9-trimethyl-4-[(2-tetrahydro-2*H*-thiopyran-4-ylethyl)amino]-3,4-dihydro-  
2*H*-pyrano[2,3-g]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-4-({[6-(4-chlorophenyl)-3-pyridinyl]methyl}amino)-2,2,9-trimethyl-3,4-  
dihydro-2*H*-pyrano[2,3-g]quinolin-3-ol,

\_\_\_\_\_ 4-[(2-benzofuranylmethyl)amino]-7-chloro-2,2,9-trimethyl-3,4-dihydro-2*H*-  
pyrano[2,3-g]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-4-[(2-hydroxypentyl)amino]-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-  
g]quinolin-3-ol,

\_\_\_\_\_ 7,7-dimethyl-9-[(2-phenylethyl)amino]-8,9-dihydro-7*H*-pyrano[2,3-g]quinoxalin-8-ol,

\_\_\_\_\_ 9-{{[2-(2-fluorophenyl)ethyl]amino}-7,7-dimethyl-8,9-dihydro-7*H*-pyrano[2,3-  
g]quinoxalin-8-ol,

\_\_\_\_\_ 9-{{[2-(4-fluorophenyl)ethyl]amino}-7,7-dimethyl-8,9-dihydro-7*H*-pyrano[2,3-  
g]quinoxalin-8-ol,

\_\_\_\_\_ 9-[ (2-hydroxy-2-phenylethyl)amino]-7,7-dimethyl-8,9-dihydro-7*H*-pyrano[2,3-  
g]quinoxalin-8-ol,

\_\_\_\_\_ 7,7-dimethyl-9-(pentylamino)-8,9-dihydro-7*H*-pyrano[2,3-g]quinoxalin-8-ol,

\_\_\_\_\_ 2,3,7,7-tetramethyl-9-[(2-phenylethyl)amino]-8,9-dihydro-7*H*-pyrano[2,3-  
g]quinoxalin-8-ol,

\_\_\_\_\_ 2,3-diethyl-7,7-dimethyl-9-[(2-phenylethyl)amino]-8,9-dihydro-7*H*-pyrano[2,3-  
 g]quinoxalin-8-ol,  
 \_\_\_\_\_ 3,7,7-trimethyl-2-phenyl-9-[(2-phenylethyl)amino]-8,9-dihydro-7*H*-pyrano[2,3-  
 g]quinoxalin-8-ol,  
 \_\_\_\_\_ 2,7,7-trimethyl-3-phenyl-9-[(2-phenylethyl)amino]-8,9-dihydro-7*H*-pyrano[2,3-  
 g]quinoxalin-8-ol,  
 \_\_\_\_\_ 3,7,7-trimethyl-9-[(2-phenylethyl)amino]-8,9-dihydro-7*H*-pyrano[2,3-g]quinoxalin-8-  
 ol,  
 \_\_\_\_\_ 9-[(2-cyclohexylethyl)amino]-7,7-dimethyl-8,9-dihydro-7*H*-pyrano[2,3-g]quinoxalin-  
 8-ol,  
 \_\_\_\_\_ 6,7-imidazolino-3,4-dihydro-2,2-dimethyl-4-(2'-phenylethylamino)-2*H*-1-benzopyran-  
 3-ol,  
 \_\_\_\_\_ 7-hydroxy-6,6-dimethyl-8-(2-phenylethylamino)-4,6,7,8-tetrahydro-1,5-dioxo-4-aza-  
 anthracen-3-on,  
 \_\_\_\_\_ 7-hydroxy-4,6,6-trimethyl-8-(2-phenylethylamino)-4,6,7,8-tetrahydro-1,5-dioxo-4-  
 aza-anthracen-3-on,  
 \_\_\_\_\_ 6,6-dimethyl-8-(2-phenylethylamino)-2,3,4,6,7,8-hexahydro-1,5-dioxo-4-aza-  
 anthracen-7-ol,  
 \_\_\_\_\_ 7-hydroxy-6,6-dimethyl-8-(2-phenylethylamino)-7,8-dihydro-1*H*,6*H*-4,5-dioxo-1-aza-  
 anthracen-2-on,  
 \_\_\_\_\_ 6,6-dimethyl-8-(2-phenylethylamino)-2,3,7,8-tetrahydro-1*H*,6*H*-4,5-dioxo-1-aza-  
 anthracen-7-ol,  
 \_\_\_\_\_ 9-hydroxymethyl-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2*H*-pyrano[2,3-  
 g]quinolin-3-ol,



\_\_\_\_ 2,2,9-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3,7-diol,

\_\_\_\_ 7-aminomethyl-2,2,9-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,

\_\_\_\_ 7-chloro-2,2,9-trimethyl-5-oxy-4-[(2-phenylethyl)amino]-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,

\_\_\_\_ 7-chloro-4-[[2-(4-fluorophenyl)ethyl]amino]-2,2,9-trimethyl-5-oxy-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,

\_\_\_\_ 7-chloro-2,2,9-trimethyl-5-oxy-4-(pentylamino)-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,

\_\_\_\_ 4-[[2-(fluorophenyl)ethyl]amino]-7-hydroxymethyl-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol or

\_\_\_\_ 2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol.

53. (Currently Amended) A benzopyran derivative or pharmaceutically acceptable salt thereof which is

\_\_\_\_ 2,2,7-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,

\_\_\_\_ 3,3-dimethyl-1-[(2-phenylethyl)amino]-2,3-dihydro-1*H*-pyrano[3,2-*f*]quinolin-2-ol,

\_\_\_\_ 7-hydroxymethyl-2,2,9-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,

\_\_\_\_ 7-chloro-2,2,9-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,

\_\_\_\_ 7-chloro-4-[[2-(4-fluorophenyl)ethyl]amino]-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,

\_\_\_\_ 7-chloro-4-[[2-(2-fluorophenyl)ethyl]amino]-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,

- \_\_\_\_\_ 7-chloro-4-{{2-(4-chlorophenyl)ethyl}amino}-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,
- \_\_\_\_\_ 3-hydroxy-2,2,9-trimethyl-4-[2-(phenylethyl)amino]-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinoline-7-carboxylic acid,
- \_\_\_\_\_ 4-{{2-(4-aminophenyl)ethyl}amino}-7-chloro-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,
- \_\_\_\_\_ 7-chloro-4-{{(2-hydroxy-2-phenylethyl)amino}-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,
- \_\_\_\_\_ 7-chloro-2,2,9-trimethyl-4-{{2-(1-piperidinyl) ethyl}amino}-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,
- \_\_\_\_\_ 7-chloro-4-{{2-(4-chloropyrazol-1-yl)ethyl}amino}-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,
- \_\_\_\_\_ 7-chloro-4-[2-(2-pyridylethyl)amino]-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,
- \_\_\_\_\_ 7-chloro-4-[2-(3-pyridylethyl)amino]-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,
- \_\_\_\_\_ 7-chloro-4-[2-(4-pyridylethyl)amino]-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,
- \_\_\_\_\_ 7-chloro-4-isoamylamino-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,
- \_\_\_\_\_ 7-chloro-4-[2-(cyclopentylethyl)amino]-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,
- \_\_\_\_\_ 7-chloro-4-[2-(1-cyclopentenylethyl)amino]-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,
- \_\_\_\_\_ 7-chloro-2,2,9-trimethyl-4-(pentylamino)-3,4-dihydro-2*H*-pyrano[2,3-*g*]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-4-[(2-cyclohexylethyl)amino]-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-  
g]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-4-[(2-hydroxypentyl)amino]-2,2,9-trimethyl-3,4-dihydro-2*H*-pyrano[2,3-  
g]quinolin-3-ol,

\_\_\_\_\_ 7,7-dimethyl-9-[(2-phenylethyl)amino]-8,9-dihydro-7*H*-pyrano[2,3-g]quinoxalin-8-ol,

\_\_\_\_\_ 9-[[2-(2-fluorophenyl)ethyl]amino]-7,7-dimethyl-8,9-dihydro-7*H*-pyrano[2,3-  
g]quinoxalin-8-ol,

\_\_\_\_\_ 9-[[2-(4-fluorophenyl)ethyl]amino]-7,7-dimethyl-8,9-dihydro-7*H*-pyrano[2,3-  
g]quinoxalin-8-ol,

\_\_\_\_\_ 9-[ (2-hydroxy-2-phenylethyl)amino]-7,7-dimethyl-8,9-dihydro-7*H*-pyrano[2,3-  
g]quinoxalin-8-ol,

\_\_\_\_\_ 7,7-dimethyl-9-(pentylamino)-8,9-dihydro-7*H*-pyrano[2,3-g]quinoxalin-8-ol,

\_\_\_\_\_ 9-[(2-cyclohexylethyl)amino]-7,7-dimethyl-8,9-dihydro-7*H*-pyrano[2,3-g]quinoxalin-  
8-ol,

\_\_\_\_\_ 7-hydroxy-6,6-dimethyl-8-(2-phenylethylamino)-4,6,7,8-tetrahydro-1,5-dioxo-4-aza-  
anthracen-3-on,

\_\_\_\_\_ 7-hydroxy-4,6,6-trimethyl-8-(2-phenylethylamino)-4,6,7,8-tetrahydro-1,5-dioxo-4-  
aza-anthracen-3-one,

\_\_\_\_\_ 7-hydroxy-6,6-dimethyl-8-(2-phenylethylamino)-7,8-dihydro-1*H*,6*H*-4,5-dioxo-1-aza-  
anthracen-2-one,

\_\_\_\_\_ 9-hydroxymethyl-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2*H*-pyrano[2,3-  
g]quinolin-3-ol,

\_\_\_\_\_ 2,2,9-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2*H*-pyrano[2,3-g]quinoline-3,7-  
diol,

\_\_\_\_\_ 7-aminomethyl-2,2,9-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-pyrano[2,3-g]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-2,2,9-trimethyl-5-oxy-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-pyrano[2,3-g]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-4-[[2-(4-fluorophenyl)ethyl]amino]-2,2,9-trimethyl-5-oxy-3,4-dihydro-2H-pyrano[2,3-g]quinolin-3-ol,

\_\_\_\_\_ 7-chloro-2,2,9-trimethyl-5-oxy-4-(pentylamino)-3,4-dihydro-2H-pyrano[2,3-g]quinolin-3-ol,

\_\_\_\_\_ 4-[[2-(4-fluorophenyl)ethyl]amino]-7-hydroxymethyl-2,2,9-trimethyl-3,4-dihydro-2H-pyrano[2,3-g]quinolin-3-ol or

\_\_\_\_\_ 2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-pyrano[2,3-g]quinolin-3-ol.

54. (Currently Amended) A method of treating arrhythmia comprising the step of administering to a patient an effective dosage of a pharmaceutical compound, wherein the pharmaceutical compound comprises the benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 1. A pharmaceutical comprising the benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 1 as an active ingredient.

55. (Canceled)

56. (New) A benzopyran derivative or pharmaceutically acceptable salt thereof which is 2,2,7-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-pyrano[2,3-g]quinolin-3-ol.

57. (New) A benzopyran derivative or pharmaceutically acceptable salt thereof which is 7-hydroxymethyl-2,2,9-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-pyrano[2,3-g]quinolin-3-ol.

58. (New) A benzopyran derivative or pharmaceutically acceptable salt thereof which is 7-chloro-2,2,9-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-pyrano[2,3-g]quinolin-3-ol.

59. (New) A benzopyran derivative or pharmaceutically acceptable salt thereof which is 7-chloro-2,2,9-trimethyl-4-[[2-(3-pyridyl)ethyl]amino]-3,4-dihydro-2H-pyrano[2,3-g]quinolin-3-ol.

60. (New) A benzopyran derivative or pharmaceutically acceptable salt thereof which is 7-chloro-4-[(2-cyclohexylethyl)amino]-2,2,9-trimethyl-3,4-dihydro-2H-pyrano[2,3-g]quinolin-3-ol.

61. (New) A benzopyran derivative or pharmaceutically acceptable salt thereof which is 7,7-dimethyl-9-[(2-phenylethyl)amino]-8,9-dihydro-7H-pyrano[2,3-g]quinoxalin-8-ol.

62. (New) A benzopyran derivative or pharmaceutically acceptable salt thereof which is 9-{[2-(4-fluorophenyl)ethyl]amino}-7,7-dimethyl-8,9-dihydro-7H-pyrano[2,3-g]quinoxalin-8-ol.

63. (New) A benzopyran derivative or pharmaceutically acceptable salt thereof which is 7-hydroxy-6,6-dimethyl-8-[(2-phenylethyl)amino]-7,8-dihydro-1H,6H-4,5-dioxo-1-aza-anthracen-2-one.